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List of Acronyms:

ANCAR	*Agence Nationale de Conseil Agricole*
AFD	*Agence Française de Développement*
ARB	*Projet Arachide de Bouche*
CIAT	Centre International d'Agronomie Tropicale
CILSS	Comité Inter Etat de Lutte Contre la Sécheresse au Sahel
CLCOP	Comité Local de Concertation des Organisations Paysannes
CNIA	Comité Nationale Interprofessional de l'Arachide
CNCA	National Agriculture Credit
CNCAS	Caisse Nationale de Crédit Agricole
CR	Rural Community (Communauté rurale)
CRS	Catholic Relief Services
CTO	Conseiller Technique
CVS	Comité Villageois de Semences
DA/DISEM	Direction de l'Agriculture/Division des Semences
DCE	Direction du Commerce Extérieur
DCEG	Dakar Consulting and Engineering Group
DRD	Directeur Régional du Développement
DRC	Democratic Republic of the Congo
DRDR	Direction Régionale du Développement Rural
EARO	East Africa Regional Office
ECOWAS	Economic Committee of West African States
FAO	Food and Agriculture Organization
FCFA	Franc Communauté Financière Africaine
FENPROSE	Fédération Nationale des Producteurs de Sésame
FEWSNET	Famine Early Warning System Network
FFP	Food For Peace
GOS	Government of Senegal
Ha	Hectares
HH	Household
IR	Intermediate Result
ISRA	Institut Sénégalais de Recherches Agricoles
MAE	Ministry of Agriculture and Animal Husbandry
MT	Metric Ton
NARI (NARS)	National Agriculture Research Institute
NAWFA	National Women Farmers' Association
NGO	Non-Governmental Organization
OCHA	Office for Coordination of Humanitarian Affairs
OFDA	Office of Foreign Disaster Assistance
ONCAD	Office Nationale de Commercialisation et d'Approvisionnement pour le Développement du Monde Rural
PAM	Programme Alimentaire Mondial
PM	Project Manager
PSAOP	Projet des Services Agricoles et des Organisations de Producteurs
RRA	Rapid Rural Assessment
RRDS	Regional Rural Development Societies
RTA	Regional Technical Advisor
SFD	Système Financier Décentralisé
SONACOS	National Company for Oil seed Marketing
SONAGRAINE	National Grain Company
SONAR	Société Nationale de Recouvrement
SoW	Scope of Work

SVF	Seed Voucher and Fairs
SV&F	Seed Voucher and Fairs
UGAO	Union of all farmers associations in the Ouadiour district
UN	United Nations
UNIS	National Inter-professional Seed Union / l'Union Nationale Interprofessionnelle des Semences
UNOPS	National Union of private seed operators / l'Union Nationale des Opérateurs Privés Semenciers
USAID	United States Agency for International Development
USD	US Dollar
WARO	West Africa Regional Office
WFP	World Food Program

1.1- Introduction

In the spring of 2003, upon the donor's request, CRS/Senegal submitted a proposal to the Office of Foreign Disaster Assistance of (OFDA) for a one-year emergency response project entitled the *Senegal Emergency Strengthening of Seed Security and Stakeholder Capacity Project*, which was approved and implemented in May 2003-October 2004. The main purpose of the project was to increase food security in rural Senegalese communities a combined strategy of enabling access to quality seed for the 2003 planting season while enhancing the capacities of various stakeholders including communities, partner organizations, and research institutions to mitigate food and seed insecurity. Access to quality seeds was to be established through a series of Seed Fairs, following a Seed Fair and Voucher concept already developed by CRS and successfully implemented in several countries of East Africa and in Sierra Leone. The rationale for coordinating the Seed Fairs responded to an emergency situation facing Senegal brought about by a combination of factors.

1.2 Context

According to a document review and rapid assessment carried out prior to proposal submission, Senegal suffers from chronic, seasonal, and transitory food insecurity. Seasonal food insecurity occurs traditionally during the "hungry season" from June to September, while chronic food insecurity has steadily risen with growing cereal deficits during the last 12 years and high rates of malnutrition among children, evidenced by 23% stunting and 7% wasting rates, (UNICEF, The State of the World's Children 2005).

CRS determined that Thiès, Ziguinchor, Diourbel, and Fatick were the most appropriate regions to target considering coverage by other donors in areas most affected by the drought conditions preceding the 2003 growing season.

1.3 Project goals and objectives

Goal: Improved food security among drought-affected farmers in Senegal.

Strategic Objective 1: Seed insecure farm families in 4 regions of Senegal have access to seed of acceptable quality of preferred crops and varieties in time for planting in the 2003 rainy season

IR1: 23,632 seed insecure farm families participate in seed vouchers and fairs in 4 Regions of Senegal.

Profile of targeted population: drought affected farmers who face seed shortages due to depletion of their asset base.

Length of time needed to fully satisfy objective: May 2003 – July 2003.

Strategic Objective 2: Improved capacity of program stakeholders to mitigate food and seed insecurity.

IR1: The capacity of program stakeholders to carry out food and seed system & security assessments is strengthened in four regions of Senegal.

Profile of targeted population: CRS and CRS partners working in drought affected areas or providing support to that work.

Length of time needed to fully satisfy objective: May 2003 – October 2004.

IR2: Role of market in local seed systems strengthened in four regions of Senegal.

Profile of targeted population: CRS and CRS partners working in drought affected areas or providing support to that work.

Length of time needed to fully satisfy objective: May 2003 – April 2004.

IR3: Linkage of small farmers with agriculture research in technology transfer strengthened.

Profile of targeted population: IARCS, CIP, IITA, Senegalese agricultural research centers, and farmers.

Length of time needed to fully satisfy objective: May 2003 – October 2004.

1.4 Results of activities undertaken

1.4.1 Strategic Objective 1

Profile of targeted population: drought affected farmers who face seed shortages due to depletion of their asset base.

The above intermediate result and objective have been achieved through the following activities:

- Seed Fair Organization Training for CRS and Partners
- Local Seed Fair Trainings and Organizing Committees Formed.
- Organizing Committees and Partners plan Seed Fairs, vulnerable households identified and informed and seed suppliers assessed and sensitized.
- Seed Fairs conducted, monitored, and assessed.

1.4.2 Planning & Implementation of Proposed activities

Several project activities were planned and carried out during the months of May, June, and July 2003, mostly relating to SO1, or the enabling of farm families to access quality seed through Seed Fairs and Vouchers.

- Training for Rapid Seed Security Assessment, Thiès. As the timeframe prior to implementation did not permit a complete assessment, rapid participatory seed focused assessments were conducted as baseline.
- Stakeholders launching meeting: Dakar: the purpose of the meeting was an exchange with project stakeholders, on the seed fairs concept and methodology.
- Seed Fair Training and Planning Workshop, *Thiès,*
- Local Seed Fair Trainings and Organizing Committees formed in the arrondissement of Thiès, Diourbel, Fatick, and Ziguinchor:

Following the central workshop, several two day trainings were conducted at the arrondissement levels of each region for partner staff and community members who are to form local seed fair committees.

- Planning and Preparation of Seed Fairs in the Thiès, Diourbel, Fatick, and Ziguinchor arrondissement

Once local trainings had taken place and Seed Fair Committees formed, the Committees established guidelines to target beneficiaries, began sensitizing local communities about the Fairs, and determined seed prices based on local markets.

- Implementation, Monitoring and Assessment of Seed Fairs in 36 locations in the regions of Thiès, Diourbel, Fatick, and Ziguinchor

The actual start date was June 09th with the 1st Seed fair in Ziguinchor area (Sindian), and the second in Thiès area on June 10th (Ndieyène Sirakh). But the official launching ceremony of this program was held on June 20 in Cherif Lo village in Thiès region, presided over by the Ministry of Agriculture, Technical Chief Advisor and a representative of both the US Embassy and USAID local Mission.

A total of 40 seed fairs were carried out in 38 locations. 38 Seed Fairs were carried out in 36 locations of the four regions during June and July 2003, and 2 in July of 2004.

1.5 Analysis of Results

1.5.1

The partnership between Catholic Relief Services (CRS), Caritas Thiés, Caritas Ziguinchor, Caritas Kaolack, Caritas Dakar, the various *Direction Régionale du Développement Rural* (DRDR) in concerned regions, The *Agence Nationale de Conseil Agricole et Rural (ANCAR)* and some local village associations resulted in achieving the following results as compared to descriptive indicators on the program.

Table 1: Seed Fair and vouchers achievements against indicators

Indicators	**Objectives**	**Achievements**	**% achievement to objective**
# of regions	04	04	100 %
# of HH identified	Not set	26,082	
# of beneficiary HH	23,632	25,194	101.60 %
# of Women HH	Not set	8,904	35.34%(achieved Percent women of total HH)
# of beneficiary villages	Not set	728	
Value of Voucher	$16 .50	$16.50	100 %
Total Vouchers value	$388,328	$410,105	101.18 %
Groundnuts seeds		360.485 MT	93.42 %
Millet seeds		11.934 MT	3.09 %
Niebe seeds cowpea		7.330 MT	1.90 %
Corn seeds		4.681 MT	1.21 %
Rice seeds		0.888 MT	0.23 %
Sorghum seeds		0.388 MT	0.10 %
Others		0.209 MT	0.05 %
Total quantity of seeds		385.915 MT	100.00 %

1.5.2 Implementing Partners

Caritas Thiès covered the regions of Thiès and Diourbel. Caritas Thiès partners in this SV&F program were agents from the Seed Department of the Ministry of Agriculture and Animal Husbandry (MAE). MAE was in charge of collecting samples of groundnuts from registered vendors, analyzing the products in their seed laboratories and determining the germination rate. Importance of this indicator resides in the identification of quality seeds and good quality seed vendors.

Caritas Ziguinchor covered the departments of Bignona, Oussouye and Ziguinchor. This region is characterized by the Casamance conflict that lasted for more than 20 years, still on-going at the time of project implementation. Active conflict negatively impacted the beneficiary sensitization program as well as the actual implementing of the fairs. Due to the insecurity, travel had to be carefully calculated and, therefore, limited the planning sessions at the community level prior to the fairs. For security purpose, the SF&V teams had to regularly liaised with the army in any of their moves throughout the region.

Local partners of Caritas/Ziguinchor were two departments of the MAE: the Seed Department and the national agency for rural development promotion (ANCAR). The later helped in the voucher beneficiaries identification and sensitization.

An added detail about the program in Ziguinchor, was that the government subsidized groundnut seeds that were used in the seed fairs through SONACOS (Senegal Peanut parastal) (1 kilo of unshelled groundnut was sold at 75 FCFA). The groundnuts were sold in packages of 45 kg per bag which enabled beneficiaries to access nearly 3 times more groundnuts than they would have under normal market conditions.

Caritas Kaolack was added onto the program o cover half of the geographic region of Fatick between Caritas Dakar (departments of Fatick and Foundiougne) and Caritas Kaolack (department of Gossas). Activities of Caritas Kaolack were located in the Gossas and Ouadiour rural community districts. CRS hired a consultant to help coordinate the program in Caritas Kaolack targeted regions.

Caritas Dakar was in charge of the SV&F program in the departments of M'Bour (region of Thiés) and Fatick (not covered by Kaolack).

The Seed division of the local decentralized Ministry of Agriculture provided certification of germination samples taken during each fair[1].

Table 2- Overview of LOA Seed fair distribution results

The following table presents an overview of results of SVF activities according to: regions, number of fairs, number of beneficiaries, quantities of seeds distributed and total voucher value.

Regions	Number of fairs	Number of beneficiaries	Quantity of seeds distributed (MT)	Total voucher value (1US =500 CFA)
Thiès/Diourbel region	- Region of Diourbel: 7 - Region of Thiès: 10 Total: 17	- Women: 4,765 - Men: 6,107 Total: 10,872	- Groundnut: 143.511 - Millet: 4.806 - Cowpea: 1.744 - Sorghum: 0.071 - Other: 0.044	$179,106
Ziguinchor region	11	- Women: 598 - Men: 3,780 Total: 4,378	- Groundnut: 96.572 - Cowpea: 4.621 - Sorghum: 135 - Corn: 4.503 - Millet: 5.703 - Rice: 888	$70,970
Gossas district	4	- Women: 1,814 - Men: 3,356 Total: 5,170	- Groundnut: 64.494 - Cowpea: 0.827 - Sorghum: 0.183 - Corn: 0.128	$81,293
Fatick/M'Bour districts	6	- Women: 1,727 - Men: 3,047 Total: 4,774	- Groundnut: 55.853 - Millet: 1.425 - Cowpea: 0.138	$78,736
TOTAL				USD $410,105

[1] Original certification documents are in French and available at CRS/Senegal

1.5.3- Evaluation of the fairs' organization: CRS convened implementing partners and stakeholders to an evaluation/reflection of the implementation of the fairs in September 2003, which examined the following topics: constraints in implementation and recommendations for future fairs.

1.5.4 Constraints

- The head of the Fatick district committee's plan was to include all the 67 villages in the program in spite of the set beneficiary identification criteria;
- Improper fair preparation due to the Caritas' lack of implementing staff;
- Late distribution of vouchers at fairs;
- Insufficient "resume beneficiary" forms.

1.5.5 Recommendations

- Avoid errors on names in the beneficiary listing and vouchers;
- Need to delete the column referring to "vendor origin" in the vendor form;
- Negotiate with vendors for fair seed prices;
- Discard seed varieties not adapted for the area;

1.5.6 Vendors

The two vendors (1 woman and 1 man) who attended almost every fair in the regions of Thiès, Fatick and Kaolack participated in the SV&F evaluation workshop in September 2003.

Pertinent remarks included:

- During fairs, increase beneficiary information on adapted seed varieties;
- Meet with registered vendors before the fairs are organized, for in-depth discussions and explanations of the fair principles;
- Avoid intrusion in the fair area of non-registered vendors;
- Increase value of voucher to allow farmer to dispose of more seeds for increased quality seeds production for sale to others.
- Not to use weighing machine but rather the standard weighing pots, for illiterate beneficiaries;
- The Seed Service Department should get more involved in seed vendor identification and registration;
- CRS should not pay for any surplus resulting from the difference between quantity of seeds weighed before the fair and quantity of seeds actually sold;
- The value of the voucher should allow the farmer to sow at least quarter (1/4) of a hectare.

1.6 Findings of partner interviews

1.6.1 Rapid Food and Seed Security Assessment

Constraints

- Not enough time for a comprehensive theoretical and practical Rapid Rural Assessment (RRA) due to time constraints being at the onset of the rainy season
- As CRS /Gambia was in the same process, its staff was invited to these training sessions, and French-English translation was required necessitating additional time spent on clarifications at each stage of the training.

Recommendations:

- Set up a network for primary data collection.
- more training for emergency programs of this nature

1.6.2 Implementation of the fairs

One of the major constraints for the beneficiaries was that the voucher was only valid for the very day of the seed fair after which, it would have no value and would not be redeemed. With

regards to this specific constraint, the beneficiaries did not have any choice but to exchange vouchers against the seed available that day in the fair. The market was not operating under the principles of supply/demand to stabilize prices (see annex IV), rather it was the pressure on the beneficiaries to redeem vouchers as quickly as possible which put them in an uncomfortable situation. This was one of the reasons of relatively high prices during the fairs(See Annex on Prices). Reflection should continue for future seed fairs in order to find appropriate and acceptable solutions for both parties.

1.7- Assessment of results from the fairs

Component Activities:
Two types of results assessments were conducted to determine the level of impact that the SVF activities on participating farmers' agriculture production during the 2003 growing season. The first of these studies, implemented in September-October in the regions targeted by the program, was to determine the extent to which seed procured during SVFs was actually planted in proportion to seed procured elsewhere.

A second survey was implemented in October-November, during which time impact on the participating household could be better determined as harvesting for some of the crops had already begun. The survey[2] compared farmer income in 2002 and 2003 derived from targeted crops for Thiès, Kaolack and Dakar regions targeted by the project[3] and illustrated that farmers from the Dakar region obtained a 70%increase in income as a result of all crops cultivated in the fairs, farmers of Kaolack region, 60% increase and Thiès region, 60%. In terms of specific crops produced, millet performed 105% better overall in SVF targeted regions from 2003 growing season, sorghum 114%, groundnut 13% and niébé 25%.

2.0 Strategic Objective 2 – Improved capacity of program stakeholders to mitigate food and seed insecurity.

Partners and Stakeholders worked closely with CRS to determine appropriate strategies for implementing S.0 2. In addition to achieving the proposed results for this objective, CRS was resilient in its response to the desert locust emergency, which affected most of the zones covered by Caritas Thiès, Kaolack and Dakar with the funding from this program. CRS and Caritas actions in responding to the locust emergency were commended by the government of Senegal and local communities despite the level of devastation. The synopsis that follows reviews achievements by intermediate result.

2.1.1 Intermediate Result 1 – The capacity of program stakeholders to carry out food and seed system & security assessments is strengthened in four regions of Senegal.

From February 23-28 2004 CRS Senegal held, in collaboration with CRS/The Gambia, a seed system security workshop in Kaolack, Senegal with 40 participants. Objectives were to:

- Discuss seed system security – compare with 2003 rapid assessment, change from 2003 and implications for 2004 agriculture season
  Develop the capacity for CRS and partner staff to conduct participatory seed security assessments.

[2] Results presented in Joseph Sedgo, Regional Technical Advisor CRS/WARO Mcknight Foundation Workshop presentation, January 2004
[3] Ziguinchor data was not included in this analysis

The workshop focused on the development of an assessment tool through the examination of past experiences on the themes: Seeds vouchers and fairs, Variety and seed quality, seed security, strengthening seed systems, and moving from relief to recovery. At the end of the first 2-days of the session, a draft tool was proposed for field-testing. The second part of the training was dedicated to testing the tool in Kaolack communities through focus groups and individual interviews for the Senegal team, while the Gambia team returned for field testing in the Gambia in order to capture needs for adjustments etc. commensurate with local realities. By the end of the 4-day workshop, the Senegal participants had produced an assessment tool with which to conduct the seed security assessments in the 4-targeted regions (Thiès, Ziguinchor, Diourbel and Fatick) during the week of the 5 of April.

Participants included: partners from Caritas Kaolack, Ziguinchor, Thiès and Dakar in addition to members of local Decentralized government DRDR from the 4 targeted regions and CRS/Senegal key staff from the program, CRS/The Gambia with partners from the National Agricultural Research Institute (NAARI) and from National Association of Women Farmers. (NAWFA).
Dr. Tom Remmington, Agriculture Technical Advisor for CRS/East Africa Region, assisted by Dr. Paula Brammel, consultant and Mr. Kisma, Wague of ISRA/Bambey Senegal, conducted this workshop.

2.1.2 Senegal seed security study:

Kisma Wague led the Senegal study in coordination with 3 teams comprised of CRS and Caritas staff in addition to local extension services from ANCAR and DRDR/Senegal. The study covered a total of 24 villages in the 4 regions, utilizing participatory focus groups and individual discussions. Study teams were composed of 4-5 persons from the above mentioned organizations all having attended the training and development of the assessment tool workshop preceding the study.

The general conclusions of the study were:

- Despite a good rainfall in 2003 growing season, the insecurity of groundnut crop persists
- Millet is exclusively obtained from self-saved seeds, and has been little affected by climatic conditions
- Sorghum, corn and rice have also not suffered from climatic conditions and are obtained for the most part from farmer saved seed
- The participatory nature of the study permitted all involved with a positive learning experience that will reinforce community extension activities.
- Practical recommendations from this study include support and reinforcement of seed seller capacity: through training on areas such as seed handling and selection for improved quality. Activities were also recommended for the reconstitution of community level seed capital.

The study focused on seed security rather than food security. This was done intentionally by CRS for several reasons:

- Despite the rapid food and seed security assessments undertaken in June 2003, CRS felt that the critical need in food security would be tackled in addressing seed security as a priority.
- To maintain the focus launched by Seed Vouchers and Fairs activities on seed relief rather than food relief
- To outline a picture of how the interventions in seed relief through the fairs could transition to the recovery (development) stage through farmer and team recommendations for follow-on activities.

2.1.2 Deviations from project document: none

2.2Intermediate Result 2 – Role of market in local seed systems strengthened in four regions of Senegal.

A Seed enterprise study was conducted followed by a workshop on it's the results. ,.

Results from the study entitled " Seed system survey and enterprise Stakeholder workshop " contracted to Dakar Consulting and Engineering Group (DCEG) after a competitive bid process, included the following highlights for each study objective:

2.3.1 Seed market flow survey

This survey included a detailed overview of food and cash crops of Senegal, marketed vs. seed procured through traditional circuits and integration of the 2 systems:
Since 1990, with the abolishment of state sponsored Rural Development Regional companies, that used to reconstitute food crops, (millet, corn, rice, sorghum and cowpeas) in collaboration with local farmers, private sector seed vendors have assumed this role particularly for rice and corn.

Credit schemes such as those provided by para-statal organizations, National Company for Oil seed Marketing (SONACOS) and National Grain Company (SONAGRAINE) filled the gap for replenishment of seed capital after 1990. However, with increased financial strain on farmers, reimbursement rates fell from 80% to 30%. As a result, annual surface areas planted show that 75% to 90% of seed come from largely of systems accessible to farmers (own saved seed, barter with other farmers and through purchase from seed multipliers, particularly for food crops.

Despite further attempts by the Government of Senegal with donors to re-organize the seed sector, there has been a steady degradation of the seed capital available to farmers, particularly for groundnut where "stored grain" has been utilized as seed for more than the last 5 years.
It is a government priority as expressed in the Poverty Reduction Strategy, the policy letter on the groundnut sector and other key sector document that this situation need to be redressed at the community level with seed provided by national research station. Findings obtained through qualitative and quantitative surveys confirm this information[4].

2.3.3 Recommendations: integration of the formal and informal seed systems would be an excellent strategy to ensure for the sustainable quality seed at the community level. The schema entailed by an integrated system would require the participation of the following actors:

- State: provide legal framework under the law for Agricultural orientation and agro-pastoralism.
- Seed vendors and community level farmer's associations
- Agricultural producing households
- Extension services: state and NGO
- Financial system: funds to be secure by the State
- Farmers and intermediary seed traders

It will be essential that the following elements be taken into account:

- Research: to ensure for sustainable improved quality seed available to farmers
- Technical assistance/Certification of seed: these are key for quality control and to facilitate farmer access to quality seed.
- Financial system: National Agricultural credit potential partner and others to be identified as this is a crucial element for the sustainability of the sector, particularly given the past problems with financing.

The second part of this study consisted of a workshop with key stakeholder representatives from the seed sector including: National Research institute, farmers, Partner and government extension services, seed vendors and financial institution from the 4 regions targeted by the project. The workshop held the 17-18 August at the Centre Foret, Thiès, and Senegal.

After citing examples of advantages and constraints experienced in the formal and informal seed sectors, the workshop focused on how the 2 levels would be integrated.

- Formal level: the national level seed production agencies: like (National Inter-professional Seed Union UNIS and National Union of private seed operators UNOPS) would be tasked with certified

[4] Dakar Consulting and Engineering Group (DCEG) Seed Market System Study, commissioned by CRS/Senegal. July, 2004

nuclear seed production and disseminating it through former State cooperative storehouses (no longer in use) throughout the country

- Informal system: selected farmers at the community level would be trained in improved practices for the production of foundation seed (from nuclear seed obtained through certified agencies). This seed would be sold through traditionally used structures such as weekly marketplaces, intermediaries and directly to farmers.
- Plans for the integration to take place would depend on the location of seed, financing of the mechanism.
- The condition for the sustainability of this plan would depend on the production of foundation seed insufficient quantity, the organization of groups and the availability of funding for the plans through traditional bank, credit union available at the community level.

2.3.4 Deviations from project document and justifications
Seed trader training was not conducted rather; seed traders were key participants in the study and in the workshop, which focused on the integration between commercial and farmer seed systems

2.4. Intermediate Result 3 – Linkage of small farmers with agriculture research in technology transfer strengthened.

In collaboration with the Institute Senegalese de Recherche Agricole (ISRA), Caritas covering targeted regions of the program (Dakar, Thiès, Ziguinchor and Kaolack) and local decentralized government extension services (DRDR), CRS proposed a community seed security (multiplication) program entitled farmer synergy research. This activity, which falls directly under the scope of IR 3, was developed through a series of meetings and discussions between ISRA, Caritas, DRDR and CRS. The objectives of this program were to support community seed production with technical and material resources to produce quality seed, creating seed villages. These seed villages would, in turn, sell their seed to interested farmers at market price, creating an income-generating mechanism while furnishing quality seed to seed-poor communities. Thirty pilot farmers per village have been selected from the four selected regions to multiply nuclear seed from one of these varieties: millet, cowpea, groundnut and corn.

2.4.1 Justification for the synergy seed multiplication

Seed multiplication activities of the selected varieties linking ISRA to community seed producers were deemed a more appropriate implementation strategy by key stakeholders and the ISRA, than those stipulated in the project document as proposed activities for IR3. Although stipulated in the project document that the focus on mitigating food and seed security would include research on cassava and sweet potato, these crops were not determined priority in the farming systems of the targeted regions. Rather, the seed security assessments of April, 2004 demonstrated that groundnut, maize, and cowpea were much more sensitive and vulnerable food crops in the typical farmer's seed security system of the targeted regions than cassava. Sweet potato, furthermore, was not a priority food nor cash crop in the targeted regions and was therefore not included.

The institutional linkages proposed to be strengthened in the project document between ICRISAT, IITA and CIP were furthermore determined not to be priority over strengthening the collaboration locally between the ISRA, local government extension, community extension workers through Caritas, and selected communities. Overall, the program reinforced the experience of ISRA researchers having collaborated with farmers during on-farm trials.

Table 4: Selected villages by region for seed synergy project

Caritas	Dakar		Thiès		Kaolack		Ziguinchor	
Regions	Thiès	Fatick	Thiès	Diourbel	Diourbel	Fatick	Ziguinchor	
Department	M'Bour	Fatick	Thiès	Bambey	Diourbel	Gossas	Bignona	
Communauté rurale	Sandiara	Niakhar	Touba Toul	N'Goye	Toki Gare	N'Diéné Lagane	Sindia	Ouonck
Villages	N'Diouck Fissel	Mem	Newrane	N'Dimb	Walallane	N'diene Lagane	Kakène	Nidiagne
	Sandiara Sérerre	Sob	M'Boltogne	Batale	Gabassene	Thielle Pathiene	Diagongue	Djinoubor
	Djolofira Sérerre	Satème	M'Bampana	Sessène	Toure	Theorou Cossane 1	Médiédie	Djiguipoune
							Ouniock	Ghamoune
							Sindia	Santack

Goals for this program were:

-To transfer improved technology and seed to farmers in vulnerable regions

-To strengthen farmers groups through the creation of "seed villages" to manage and disseminate improved seed and technology

Table 5: Synergy Seed varieties planted by region

Thiès/Diourbel (peanut basin)	Fatick	Ziguinchor
1HA peanut –fleur 11	1 HA peanut – 73-33 and fleur 11	1HA69-101 peanut variety
10 HA millet-IBV 8402, IBV 8004	10 HA Souna III	5HA Synthetic C and Early Thai- corn
5 HA Sesame: 32-15,33-1-7 (replaced by cowpea)	5 HA Sesame: 32-15,33-1-7(replaced by cowpea)	5 HA sesame- Primoca (replaced by corn)

The following criteria were applied to the selection of participating farmers:

1- The farmer owns the land where seed is being produced;
2- Respect of crop rotation (example: farmer should not produce millet on a lot where millet has been produced the previous campaign);
3- Farmer should own an equipment of traction (example: horse/bulls, sowing equipment, etc);
4- Existence of human labour in the household;
5- . Farmer is willing to provide manure or compost;
6- Women were given priority in this program as long as the technical criteria are met.

Although sesame was intended for multiplication in this program, certified sesame seed was not available in country at the time of launching of this program. Therefore, improved variety Niébé (cowpea) was proposed to the Northern regions (Thiès, Mbour, Fatick, Kaolack) and improved variety corn to the Ziguinchor region to replace sesame.

The program aimed to serve as a transition from relief to development in communities affected by the emergency drought of the 2003-growing season. Decentralized government extension services in

addition to CRS partners played critical roles in the training, sensitization and monitoring of this activity with targeted farmers.

2.4.2 Details of the seed synergy activity program:
CRS-Caritas planned to support the village seed committees in purchase of limited amount of the best-selected foundation seed at harvest from each region. $10,000 was planned for foundation seed purchase from the seed multiplying farmers, which is expected to become seed funding for the seed enterprise established in each region. The seed service at the government Direction of Rural Development 's role in the activity was to certify and approve the selected seed. Agreements were established for this program to specify roles of each stakeholder:, the local decentralized government, (Direction of rural development seed division) was responsible for the monitoring of the selected farmers and the evolution of their seed production. Caritas extension agents were to provide monthly reports on progress to CRS.

The indicators that will be followed to measure the success of this program include:
- Identification/regional/ gender of farmer/seed multipliers
- Preparation of soil
- Plant density
- Manure: type: date of application and quantity spread
- Density at harvest- estimation of the production at harvest

The community seed synergy multiplication program implemented in collaboration with the Institute Senegalese de Recherche Agricole (ISRA), local decentralized government extension services (DRDR) and Caritas covering targeted regions of the program (Dakar, Thiès, Ziguinchor and Kaolack) continued through October 2005.

Through this program, the Caritas partners established contractual relations with each of the farmers as a mechanism to ensure that improved practices will be applied.
The following chart describes the status of the seed multiplication activities as of the end of August 2004.

Table : 6 Seed Synergy activities

	Caritas Kaolack	Caritas Dakar	Caritas Thiès	Caritas Ziguinchor	Total
Number of Districts	2	2	2	2	8
Number of villages	6	6	6	10	28
Number of seed producers	180	180	180	116	656
Seed crops being multiplied	Groundnut	Groundnut	Groundnut	Groundnut	
	Millet	Millet	Millet	Corn	
	Cowpea	Cowpea	Cowpea	Cowpea	
Sensitization:	Government officials, local authorities & farmers	Government officials, local authorities & farmers	Government officials, local authorities & farmers	Government officials, local authorities & farmers	
Training:	2 sessions	2 sessions	2 sessions	2 sessions	8 sessions

At the end of August 2004, late rains and swarms of grasshoppers (as opposed to the locusts described below) in the Fatick and Mbour regions were of particular concern for the millet and cowpea crop.

It was envisaged that at the end of the program, farmers should reimburse foundation seed to their respective community seed committees, which will serve as capital for the next agriculture season.

The reimbursement rates proposed for each crop are as follows:

Reimbursement to program in kind by farmers:

- Millet 100kg
- 20 kg Niébé
- 100 kg corn half of the quantities produced.
- Half of the groundnut production and the remaining purchased by the program provided availability of funds.

The expected results in terms of seed production, through the linkage of small farmers with agriculture research in technology transfer was that targeted farmers would grow certified seeds of different varieties in a sizeable quantity, to satisfy their seed needs for the next agricultural season.

2.4.3.Objectives of the Linkage of small farmers with agriculture research in technology transfer strengthened project centred on the following points:

- Production of seeds of quality in sufficient quantities and at an appropriate time to lessen the seed deficit in regions targeted by the program and to mitigate future seed shortage due to locust invasions.
- Increased usage of improved seed varieties.
- Involve rural communities and local collectivities in seed production and supply and train members in production, conservation techniques and in marketing of certified seeds.

2.5 Devastation of desert locust and impact on activities

Due to the locust invasions that occurred during June-September 2004, and in spite of CRS interventions in the locust control operations, the expected seed production has been seriously reduced.

Because of unexpected locust invasions and the central role of groundnut as the main cash crop of the country, control operations have mainly been directed to groundnut seed plots.

Towards the end of July beginning August, swarms of desert locusts of the Sahel began descending on the northern regions (Diourbel, Thiès and Mbour). Damage was minimal by the first swarms; however, larvae, which hatched during the months of November, caused significant damage to crops in these areas.

No region harvested more than half of its expected certified seed productions. Seed plots invaded by the locusts have been discarded by the Seed Service Department. Seed harvested from these plots can not be used as certified seeds.

During this 2004 agricultural campaign, massive and exceptional locust swarms invaded eight regional districts of the country. Four out of which were severely hit; this project's household beneficiaries live in three among four of these districts (Thiès, Diourbel and Fatick).

Favourable ecological conditions during July – August 2004, brought bands of locust larvae to develop into swarms of pink adults, which invaded and devastated millet, groundnut, and cowpea (niébé) crops in these areas.

2.5.1 Actions taken against locust invasions

Although the locust invasions were not considered in the project design and as such, were not budgeted, CRS took appropriate actions in terms of control operations during the infestations. Local government and Caritas Kaolack received materials and pesticides from other donors, to combat locust invasions in the Fatick region.

To assist the regions affected by the locusts that did not receive donor support, CRS purchased locust control pesticides and equipment, for mainly Caritas Thiès, Dakar, and Kaolack but also minimal provisions were made for Ziguinchor anticipating the eventuality that the swarms would alter their paths toward Ziguinchor. Including:- 700 litres of pesticides (*sumithion);*
- 24-protection gear (gloves, boots, eye protection glasses, etc.)
- 24 atomizers;
- Locust control and environment protection trainings

Early warning committees were also established in the targeted regions to advise the local action committees to take action against swarms as soon as they were spotted. Farmers for which rain-fed agriculture is the only activity or the sole resource were the most affected.

Table 7: Anticipated vs. obtained production

Regions	Expected production/region (MT)				Current region production (MT)			
	Groundnut	Millet	Maize	Cowpea/niébé	Groundnut	Millet	Maize	Cowpea:niébé
Thiès	7.20	6.00	0,00	3.00	0.00	0.00	0.00	0.60
Diourbel	7.20	6.00	0,00	3.00	2.00	0.50	0.00	0.50
Fatick	7.20	6.00	0,00	3.00	5.00	4.00	0.00	2.50
Ziguinchor	7.20	0	10.00	2.00	7.00	0	0.05[5]	0
Total	28.8	18. 00	10.00	11.00	14. 00	4.50	0.05	3.60
Percentage of target	100%	100%	100%	100%	48.6%	25%	0%	32.72%

Source: Caritas field reports - November 2004

According to FAO[6], rural households victims of the locusts invasions will be subject to difficulties in accessing quality seeds next agricultural campaign. Although cereal production in the Sahel as a whole is likely to remain within its 5-year's average[7] due to severe locust devastation (up to 40% on crops and 50% to 100% of pastures), in northern and central regions of Senegal, food insecurity (at different levels) is expected[8].

2.6 Project final evaluation findings and recommendations

Dakar Consulting and Engineering Group (DCEG), was selected to conduct the final evaluation of this after a competitive bid process to conduct the external evaluation of the program. Salient excerpts from this evaluation follow here. The complete document is included in annex to this report.

CRS established a strategy (Senegal Emergency Strengthening of Seed Security and Stakeholder Capacity Project) before the implementation of the project. Regarding the qualitative and quantitative analysis, the project has had a positive impact on direct beneficiaries.

CRS partners in the project have done a good job and have the capacity to implement seed fairs and seed system assessment.

[5] Depletion of maize seed production is due to insects other than locusts
[6] Rapport Mission d'évaluation des besoins agricoles d'urgence Sénégal, 18 au 30 octobre 2004, FAO, CILSS,PAM, FEWS NET
[7] Source: FAO/FEWSNET
[8] Source: Government reports

The seed traders sold seeds of acceptable quality, due certainly to the control of certification made by seed officers. Grégoire Sène, an official of the Seed Service, said that the tests operated on seeds bought at the fairs of Sadio (Mbacké, region of Diourbel) in 2004 were satisfactory. (please see annex 1 on germination rates by region for rates by region).

The funds for the project implementation were transferred to CARITAS without any problems. However, the attack of locusts has deeply distressed the progress of the project. Funds planned to support remaining activities were used to buy materials and insecticide to combat the locusts

Strengths and weakness are analysed though meetings led by DCEG consultants in the targeted areas. The following are excerpts from key informant meetings.

2.6.1Meetings with the various CARITAS and government staff

The consultants met with partners involved in the seed project. The various interviews have stated the weaknesses and strengths of the OFDA-funded project and the following recommendations have been made.

2.6.2Weaknesses

No problem was encountered in the implementation of the protocol. However, the beneficiaries were not entirely satisfied about the low value of vouchers.

The seed multiplication activity focused on millet, sesame and groundnut The period of implementation was not opportune for the project, and the project may not be sustainable. The late delivery of fertilizer by Caritas, in the case of millet, was not beneficial for the project. As in seed fairs, the value accorded to seed activity was very modest.

Delay has been noted in the financial and technical reporting. These problems are due to the variety and intensity of activities that CARITAS assume regularly.
Some financial difficulties occurred at the end of the project, farmers who sold their seeds to their Village Seed committees (CVS) have not been reimbursed by CRS despite initial promises as such. Future seed multiplication activities should include a marketing strategy to allow farmers to profit to their activities.

Although logistics were provided by the program, coordination at the level of Caritas was in sufficient, resulting in difficulties for Government extension agents (DRDR) for travel. The project agreement with CARITAS should have to ensured for the logistics for travel but this clause was not always respected. It was very difficult to move around in this area even with a motorbike. CARITAS always requested an activity plan for travel to sites but it was rarely respected.

It was not easy to monitor small plots (1/10 ha) and a large number of farmers. The foundation seeds were certified and 100% standardized. Other varieties of peanut, but not very important, of 73-33 are identified. Despite the assurance of ISRA, some cases of plant disease were noted. Farmers who used another seed protection chemical, without agreement of ISRA had better results than those who not used the ISRA-recommended *Granox*. Corn plots also had problems due to the attack of insects in Ziguinchor.

2.6.2 Strengths

Seed fairs were very useful for farmers, in salvaging the agricultural season for some of them. The farmers have kept seeds for the next year. They employed a new approach and they appreciated the free choice of seeds. Seed fairs allowed targeted farmers to access seeds free of charge. Some success stories are related at the rural community (CR) of Ndiéné Lagane where some farmers have stored seed.

These farmers have understood that the seed multiplication activities can constitute a new approach for farmers to access seed.

Seed multiplication activities facilitate farmer's access to quality seed (before the project, some privileged have access to quality seed). This project gives also the opportunity to reconstitute the seed capital and technology transfer.
CARITAS says that it has acquired the capacity to implement seed fairs, and conduct food security and seed system assessments. In general, through this program, CARITAS has strengthened its capacity.

Seed Fairs have mitigated the food crisis, the seed multiplication activity progress with a strengthening of beneficiaries capacities.

In general, fairs were implemented well and farmers have respected the instructions.

2.6.3 Other notes and suggestions

To facilitate the marketing of seeds, it would be better to plan for the provision of bags. Prior to the - marketing season, seeds also require chemical treatment. Farmers expecting to be reimbursed for improved cowpea seed and surplus from other multiplication trials were disappointed that funding was not available from this project to this avail . Meanwhile pending funding for this campaign, peanut is put in storage to avoid risk of theft and consumption. Millet harvests were a disaster due essentially to locusts invasions,.

Aside from the locusts invasions that resulted in loss of plots (4 plots of millet and 7 plots of cowpea) the project was well implemented well in the targeted regions. The good performance of groundnut in Fatick was noted and for millet and peanut in Ouonck of the Ziguinchor region.

2.6.4 Conclusion of the study

According to DCEG's evaluation survey (DCEG, 2005), the project was implemented well. The emergency conditions under which the project was operating justify explain the problems encountered

The end of the seed multiplication project was distressed by the locust invasions. Given the urgency created by the invasions in most of the targeted zones, CRS supplied partners with products and materials for fighting with disaster order to avoid project failure.
Seed Fairs mitigated the risk of food and seed insecurity in the targeted regions. Seed multiplication activities were also a success. Through this evaluation, we noted the capacity of partners to implement seed fairs, food security and system assessment.

Trainings and workshops were key elements in the strengthening of partners' capacity. The results show that role of the market has been considerably reinforced and regarding to recommendations formulated, right now there are partners with capacity to implement similar project.

ISRA helped farmers to increase skills in seed multiplication with the support of CRS. Overall, the intervention of CRS was a success.

2.6.5 Recommendations

Ensure in the future better participation or representation of all actors and partners for sharing of information and clarify in the activities report the role of each partner.

Close contacts with the project actors (seeds traders in particular) is needed to locate them easily and to have a preliminary control of seeds.

Plan the activities, well in advance. This project was prepared in an emergency context but the time allowed was not enough, this situation caused negative effects in some aspects.

The beneficiaries of the multiplication activity œuld, by their CVS, normally integrate a like system and then set a group of « seed operators ». The strengthening of beneficiaries' capacity and CRS partners in the multiplication activity has been an important element for the project durability and its continuation may be its extension could improve durably the informal channel of seeds production.

The project continuation (seed fairs and multiplication activity) might be a good thing for strengthening the gains and the sustainability of such activities even without donor funds.

The partners have the capacity to implement seed fairs, food security and seed system assessments. The advantages of seed fairs has been understood by all stakeholders; there are some gains as CVS who could be vectors in the rebuilding of the capital seed of Senegal who is severely in danger. The CVS could self finance their future multiplication activities.

However to avoid a brutal withdrawal of CRS intervention, harmful to the project's sustainability, CRS partners are not financially ready (see the quantitative analysis related to seeds traders above), it will be better to continue to support farmers and partners and prepare with them a self management plan.

In case of project follow-on, increase the value of beneficiaries' vouchers (seed fairs and multiplication activity)

3.0 Disposition plan of equipment purchases over $5000 USD during LOA

High valued equipment (over $5000) purchased during the life of this project has been transferred to on-going USG funded activities. In particular, a Toyota Hi-lux purchased for this project has been transferred to the "Rebuilding Basic infrastructure in the Casamance" project May 2004-May 2006. 2 laptop computers have been transferred to Caritas Ziguinchor and Dakar respectively during the life of activity will be made available for use to the Nutritional Support activities to be implemented on the SeneGambia DAP (April 2005-Dec 2006). Please see annex VI for further details.

Annexes

I. Details of fairs of 2003

II. Germination rates

III. Summary Translation of Seed System Survey, DCEG, July 2004

IV. Pricing detailed information from SVF 2003 campaign

V. List of Documents Produced

VI. Accounting of property acquired valued at $5,000 or more

Annex I: Detailed Results of Seed Fair

Order number	Date	Location of the fair	Number of villages affected	Number of households expected	Coupons distributed				Number of dependants	Number of sellers			Payment made
					Men	Women	Total	Value		H	F	Total	
Caritas Thiès													
1	10-June-03	Touba Toul	19	837	384	453	837	6 905 250	6 358	16	37	53	6 909 500
2	12-June-03	Ndieyene Sirakh 1	12	576	305	266	571	4 710 750	4 690	7	10	17	4 712 250
3	13-June-03	Kael	19	788	387	289	676	5 577 000	800	5	0	5	5 576 500
4	15-June-03	Ndieyene Sirakh 2	5	337	166	168	334	2 755 500	2 800	8	11	19	2 755 500
5	16-June-03	Ndindy 1	12	776	402	348	750	6 187 500	6 566	11	0	11	6 186 500
6	17-June-03	Keur Ibra Yacine	12	780	581	164	745	6 146 250	6 865	6	0	6	6 142 750
7	18-June-03	Ndindy 2 (Keur Ngalgou)	14	830	412	413	825	6 806 250	6 135	12	2	14	6 810 500
8	19-June-03	Bambey Serere	12	666	329	334	663	5 469 750	5 678	16	13	29	5 353 500
9	20-June-03	Cherif Lo	12	794	428	361	789	6 509 250	4 145	9	10	19	6 490 750
10	23-June-03	Koul	22	705	329	373	702	5 791 500	4 849	8	11	19	5 783 500
11	25-June-03	Kebemer (Ngandiouf)	11	599	308	290	598	4 933 500	3 105	11	9	20	4 933 500
12	27-June-03	Tassette	19	1 040	581	457	1 038	8 563 500	7 341	21	45	66	8 584 000
13	29-June-03	Ngoye	15	893	618	272	890	7 342 500	5 882	7	11	18	7 348 500
14	02-July-03	Tocky Gare	10	752	398	354	752	6 204 000	4 102	16	11	27	6 179 250
15	04-July-03	Lam-Lam	21	702	479	223	702	5 791 500	4 650	10	10	20	5 786 500

Order number	Date	Location of the fair	Number of villages affected	Number of households expected	Coupons distributed				Number of dependants	Number of sellers			Payment made
					Men	Women	Total	Value		H	F	Total	
Caritas Ziguinchor													
16	09-June-03	Sindian	35	672	640	22	662	5 461 500	6 620	4	3	7	5 424 250
17	11-June-03	Dialang	12	265	121	89	210	1 732 500	808	13	29	42	1 582 600
18	12-June-03	Enampore	4	165	28	13	41	338 250	188	1	1	2	338 250
19	13-June-03	Niaguis	36	653	440	85	525	4 331 250	5 230	5	2	7	4 222 250
20	14-June-03	Ouonck	17	480	435	16	451	3 720 750	6 550	4	2	6	3 739 250
21	15-June-03	Oukout	9	432	108	136	244	2 013 000	2 377	6	3	9	1 963 750
22	16-June-03	Tendouck	17	685	329	22	351	2 895 750	2 386	6	3	9	2 843 975
23	17-June-03	Djiniaki/Badiana	12	797	353	45	398	3 283 500	3 885	6	3	9	3 210 200
24	05-July-03	Diouloulou	17	600	507	20	527	4 347 750	5 501	7	3	10	4 193 500
25	09-July-03	Colomba	15	508	397	96	493	4 067 250	3 867	8	3	11	4 084 500
26	10-July-03	Oulampane	28	517	428	48	476	3 927 000	4 770	10	4	14	3 882 500
Caritas Kaolack													
27	22-June-04	Sadio	12	429	279	150	429	2 788 500	3003	11	23	34	2788500
28	23-June-04	Sadio	11	746	463	283	746	4849000	5222	16	34	50	4849000
29	16-June-03	Ndiéné Lagane	14	800	510	265	775	6 393 750	5 152	7	9	16	6 395 000
30	17-June-03	Ouadiour	11	800	359	307	666	5 494 500	3 693	12	-	12	5 484 500

Order number	Date	Location of the fair	Number of villages affected	Number of households expected	Coupons distributed				Number of dependants	Number of sellers			Payment made
					Men	Women	Total	Value		H	F	Total	
31	18-June-03	Fass	17	800	615	157	772	6 369 000	3 870	21	3	24	6 368 000
32	20-June-03	Gossas	13	800	404	356	760	6 270 000	4 486	30	3	33	6 269 500
33	21-June-03	Patar Lia	24	800	716	295	1 011	8 340 750	5 067	18	2	20	8 340 750
Caritas Dakar													
34	13-June-03	Sandiara	72	800	708	92	800	6 600 000	9 400	5	9	14	6 595 750
35	16-June-03	Ndiaganiao	55	800	454	340	794	6 550 500	7 658	6	11	17	6 550 500
36	17-June-03	Diouroup	12	800	235	140	375	3 093 750	4 042	6	11	17	3 093 750
37	20-June-03	Diakhao	33	802	476	326	802	6 616 500	6 544	5	2	7	6 616 500
38	22-June-03	Niakhar	35	800	440	360	800	6 600 000	9 720	20	18	38	6 594 750
39	23-June-03	Djilass	15	800	516	256	772	6 369 000	7 648	8	4	12	6 369 000
40	24-June-03	Diohine	10	431	218	213	431	3 555 750	5 540	14	12	26	3 547 500
		TOTAL	751	27 257	16 285	8 898	25 183	205703500	197 193	412	377	789	204 901 025

Results per distributed seeds

Order number	Date	Location of the fair	Number of villages affected	Number of beneficiaries[9] affected	Quantity of seeds bought by the beneficiaries (in kilograms)								Number of varieties of each seed per fair					
					Peanuts without shells	Peanuts with shells	Millet	Corn	Sorghum	Rice	Niébé	Other	Peanuts	Millet	Corn	Sorghum	Rice	Niébé
1	10-June-03	Touba Toul	19	837	11 193	-	1419	-	-	-	174	29	4	2	1	-	-	8
2	12-June-03	Ndieyene Sirakh 1	12	71	7 220	-	40	-	-	-	29	-	4	1	-	-	-	4
3	13-June-03	Kael	19	676	9 294	-	1 320	-	-	-	-	-	1	2	-	-	-	1
4	15-June-03	Ndieyene Sirakh 2	5	334	4 720	-	-	-	-	-	60	-	2	-	-	-	-	3
5	16-June-03	Ndindy 1	12	750	12 132	-	1104	-	48	-	270	-	2	1	1	1	-	4
6	17-June-03	Keur Ibra Yacine	12	745	11 446	-	60	-	-	-	49	-	1	2	-	1	-	1
7	18-June-03	Ndindy 2 (Keur Ngalgou)	14	825	12 059	-	690	-	4	-	135	-	2	1	-	1	-	3
8	19-June-03	Bambey Serere	12	663	8 429	-	-	-	-	-	91	7	2	-	-	-	-	4
9	20-June-03	Cherif Lo	12	789	11 696	-	60	-	-	-	99	-	2	1	-	-	-	1
10	23-June-03	Koul	22	702	8 830	-	-	-	-	-	192	-	2	1	-	-	-	2
11	25-June-03	Kebemer (Ngandiouf)	11	598	7 824	-	-	-	-	-	-	1	2	1	-	-	-	1
12	27-June-03	Tassette	19	1 038	11 798	-	105	-	-	-	44	-	3	1	-	-	-	3
13	29-June-03	Ngoye	15	890	9 906	-	-	-	-	-	117	7	3	-	-	-	-	1

[9] households

14	02-July-03	Tocky Gare	10	752	9 085	-	-	2	-	-	167	-	2	1	2	1	-	6
15	04-July-03	Lam-Lam	21	702	7 879	-	8	48	16	-	317	-	1	1	1	1	-	4
16	22-June-04	Sadio	12	429	6 138							3	1					
17	23-June-04	Sadio	11	746	10 747							1	1					
18	09-June-03	Sindian	35	662	531	56,216	178	913	-	-	319	18	2	1	2	-	-	3
19	11-June-03	Dialang	12	210	815	-	26	194	21	368	205	10	2	1	1	1	5	2
20	12-June-03	Enampore	4	41	238	-	-	46	-	65	50	-	1	-	1	-	1	1
21	13-June-03	Niaguis	36	525	2 077	40 590	215	96	14	138	511	44	2	1	1	2	3	1
22	14-June-03	Ouonck	17	451	301	36 990	-	430	43	-	408	4	2	-	2	2	-	1
23	15-June-03	Oukout	9	244	1 298	-	94	204	-	250	210	36	2	1	1	-	2	1
24	16-June-03	Tendouck	17	351	852	22 950	99	316	-	-	430	32	2	1	2	-	-	2
25	17-June-03	Djiniaki/Badiana	12	398	1 413	6975	212	830	-	-	429	-	2	1	2	-	-	2
26	05-July-03	Diouloulou	17	527	1 411	-	2919	1 105	-	-	1 005	-	3	1	2	-	-	1
27	09-July-03	Colomba	15	493	2 624	-	1365	152	6	68	674	13	3	1	2	1	1	2
28	10-July-03	Oulampane	28	476	3 049	206	595	219	51	-	382	2	2	1	2	1	1	1
29	16-June-03	Ndiéné Lagane	14	775	13 235	112		128	121	-	90	-	4	-	1	-	-	2
30	17-June-03	Ouadiour	11	666	13 165	-	-	-	-	-	28	-	3	-	-	-	-	1
31	18-June-03	Fass	17	772	12 819	-	-	-	39	-	257	5	4	-	-	1	-	2
32	20-June-	Gossas	13		11 468	-				-		4						

	03			760			-	-	13		222		4	-	-	1	-	2
33	21-June-03	Patar Lia	24	1011	13 807	-	-	-	10	-	230	-	2	-	-	1	-	1
34	13-June-03	Sandiara	72	800	10 907	-	1425	-	3	-	28	-	3	2	-	1	-	1
35	16-June-03	Ndiaganiao	55	794	9 360	-	-	-	-	-	4	-	2	2	-	-	-	1
36	17-June-03	Diouroup	12	375	4 420	-	-	-	-	-	-	-	1	-	-	-	-	-
37	20-June-03	Diakhao	33	802	8 701	-	-	-	-	-	-	-	2	1	-	-	-	-
38	22-June-03	Niakhar	35	800	7 468	-	-	-	-	-	89	-	1	-	-	-	-	2
39	23-June-03	Djilass	15	772	9 098	-	-	-	-	-	-	-	2	-	-	-	-	1
40	24-June-03	Diohine	10	431	5 899	-	-	-	-	-	17	-	2	-	-	-	-	1
		TOTAL	751	25,183	295 351	164,039	11,934	4 681	388	888	7,330	214	88	29	24	16	13	77
					484, 824													

Annex II Germination rates

SED germination rate for Thiès and Diourbel regions

- Diourbel

Variety	Germination rate Average	Lowest rate	Highest rate	Comments
Niebe (Cowpea)	69 % to 78%	68 %	78 %	1 seller is concerned for the low rate, others are ranging from 74 to 78%
Millet	86 to 90%	86 %	90 %	
Groundnuts Hatif de Séfa	68 to 85 %	67 %	86%	4 sellers are concerned for the low rate , others are ranging from 73 to 85 %
Groundnuts 55-437	78%	78 %	78 %	

- Thiès

Variety	Germination rate Average	Lowest rate	Highest rate	Comments
Niebe (Cowpea)	87.11 %	75 %	100 %	2 seller is concerned for the low rate, others are ranging from 80 to 100 %
Millet	87.66 %	82 %	91 %	
Groundnuts Hatif de Séfa and others	20 to 92 %	20 %	92 %	5 sellers are concerned for the low rate 20 to 54 % (notably Fleur 11 variety), others are ranging from 60 to 92 %
Groundnuts 55-437	84.12 %	80 %	92 %	

Seed beneficiaries

The number of seed vulnerable rural households who benefited from the SV&F program is 10,872. From this number 6,107 (56.17 %) are men and 4,765 (43.83 %) are women. They all came from 215 villages with an estimated 73,966 dependants in the regions of Thiès and Diourbel.

Seeds' germination rate for Ziguinchor region

Variety	Germination rate Average	Lowest rate	Highest rate	Comments
Niebe (Cowpea)	88.45 %	50.95 %	100 %	3 sellers are concerned for the low rate (50 to 60 %), others are ranging from 80 to 100 %
Sorghum	97.38 %	90.10 %	100 %	
Groundnuts: . 66-101 . Spanish . ARB	61 %	20.92 %	100 %	3 sellers are concerned for the low rate 20 to 50 % (notably 66-901 & Spanish varieties), others are ranging from 60 to 100 %
Mais (Corn)	87.21 %	40.64 %	100 %	1 seller is concerned, others are ranging from 60 to 100 %

-*Seed germination rate for Fatick region (Gossas department)*

Variety	Germination rate Average	Lowest rate	Highest rate	Comments
Niebe (Cowpea)	90.00 %	88.0 %	95 %	
Sorghum	91.00 %	89.00 %	95.0 %	
Groundnuts:	80.54 %	66.00 %	88.00 %	1 seller is concerned for the lowest rate, others are ranging from 75 to 88.0 %

Annex III. Summary translation from the Study of the Seed Systems report contracted by Dakar Consulting and Engineering Group July 2004. This study responds to S.O2, IR 1 of the project.

1. Introduction

Public institutions and NGOs, in collaboration with farming organizations and informal sellers, ensure the supply of seeds for food crops and cash crops.

From independence to the present, the Government of Senegal (GOS) has set up several organizations, technical development groups, which manage the supplying of high quality seeds to seed producers.

ONCAD, SONAR and also SONAGRAINE have provided important financial means for the reconstitution of the groundnut seed stock, estimated at 120,000 tonnes, which ensures the supply of seeds throughout all regions.

Similarly, private seed operators from the National Inter professional Union of Seed Producers (*l'Union Nationale Interprofessionnelle des Semences*, UNIS) and recently from the National Union of Private Seed Producing Operators (*l'Union Nationale des Opérateurs Privés Semenciers*, UNOPS) work, with the support of the State and commercial backers (AFD, DCE), towards the renewal of this capital.

Regarding food crops, Regional Rural Development Societies (RRDS) have intervened, since their creation, in partnership with agricultural producers' organizations, in the supply renewal of millet, corn, rice, sorghum and niébé seeds. Since the disbanding of these societies between 1985 and 1990, the supply of seeds for these crops, mainly for rice and corn, has been ensured by private seed operators.

The creation and dissolution of these structures, societies and organizations highlights the limits of this type of supply, which is based on the reconstitution of seed capital through a system of credit whose reimbursement poses huge difficulties year to year.

The rate of reimbursement from the group SONACOS/SONAGRAINES has decreased from 80% to currently 30%, with the unpaid burden becoming increasingly unbearable.

Analysis of the surface area used annually for seed plantation and of the seeds distributed in this formal system reveals that more than 75 to 90% of seeds originate from the informal sector, which, however, has not received technical and financial support.

Similarly, this system has not undergone organizational and structural developments, such as those reported for the formal system. It is based on farmers' own initiatives to obtain seeds via various channels, notably beginning with production taken from a high quality sample, exchanging between themselves, buying from mass producers or via various seed tradesmen and salesmen.

The informal system of seed supply to farmers plays an important role in view of surface areas statistics and the production of various crops, mainly cereals.

However, years of drought have an effect on the formal system as well as the informal system, obliging the authorities, financial backers and NGOs to resort to emergency programmes to cope with seed insecurity.

It is within this context that the Government, financial backers and all the partners associated with this network have set up a number of programmes and projects aiming to ensure a regular supply of quality seeds to farmers.

Since 1988, the French Development Agency financed the triennial seed program, the objective of which was to reorganize the seed network by defining the roles and contribution of all partners, and to create conditions which are favourable to the transferral of production functions and seed commercialisation to private seed operators.

This program continued and was reinforced by the State and the European Union in 1998, in support of partners from the National Interprofessional Peanut Committee (*Comité Nationale Interprofessional de l'Arachide, CNIA): UNIS, ISRA, DA/DISEM*, the pilot Groundnut Project (*Projet Arachide de Bouche, ARB*), the program of professionalization of private operators and institutional support of the CNIA, within the framework of the groundnut revival network program.

A deterioration of seed capital has been witnessed in the last 5 years, both in quantity and in quality, which is obliging the authorities to resort to what has, by agreement, been named seed shelling. This involves taking supplies from oil grain stocks, which are stored, loose in collection points or oil mill centres and distributed as seeds to farmers.

This practice, which was criticized by farmers due to the quality of the grains, was worsened by the droughts of 2002, which led CRS, in agreement with the authorities, to organize seed fairs in the most affected areas; an operation, which proved very successful.

Due to this report, the authorities, in partnership with farming organizations operating within the framework of the Farming Services and Producers' Organisation Project (*Projet des Services Agricoles et des Organisations de Producteurs, PSAOP*), have in the following documents defined strategies and directives for the creation of a durable system of supply: Document on Poverty Reduction Strategy, Letter on Groundnut Network Development Policy, Strategy Document on the Revival of the Groundnut Network, the Agro Sylvo Pastoral Orientation Law.

These directives recommend that responsibility be taken of basic processes, notably the production and commercialisation of seeds at community level, seeds resulting from seeds used for research.

The implementation of such a program requires the drawing up of a diagnostic study of the seed systems present in Senegal.

CRS' current study concerns the recommendations of the State to carry out a study to create an inventory on the formal and informal systems, the aim being to propose a durable system of seed supply.

The current institutional environment of rural producers and of the Ministry of Agriculture allows for an integration of the achievements of the two systems through an exhaustive analysis of their advantages and disadvantages.

Experts from Study Part II Workshop on Seed Enterprises involved in the Seed Sector s
General recommendations for the reinforcement of the two systems

Participants stressed the importance of professionalism from those involved, the specialisation of the producers according to various levels, the improvement of stock holding conditions, and the training and sensitising of all those involved to the production and commercialisation of seeds.

How the plan of action will work:

The plan includes the circuits of the two systems (formal and informal) and their possible integration from N1 (nuclear seed, which the formal system private seed operators should transmit to the mass-producing farmers of the informal system described below.

- The formal system is founded on a scheme of conventional seed multiplication, which conforms to the seed regulations as defined in legal texts.
- The informal system is essentially founded on skimming, i.e. the seeds taken from a farmer's annual crop to be kept for the following season.

- Research (ISRA): Via its seed production unit, the following is entrusted to ISRA: the production of improved seed; the conservation of stocks of recommended varieties, as well as the carrying out of variable trials in multiple locations intended for the introduction of new varieties. Thanks to the financial support of the State, the National Foundation of Agricultural Research, Agro-alimentaire and development partners, ISRA regularly produces all types of improved seeds, of high quality, required by the operators. These seeds are often available from February of that year.

Description of the integration process

- Formal system: The production and the commercialisation of certified seeds (nuclear and foundation seed, R1 (N1) and R2 (N2} is entrusted to agreed seed mass producers and to operators grouped within UNIS, UNOPS, or any other organisations which specialise in the production and the mass production of seeds.
- These mass producers and operators most often (as confirmed by the seed systems study) sell their seeds from cooperatives (Séccos) spread throughout the national territory.

- Informal system: In the new action plan, those producers identified and trained at grass roots community level, namely {agricultural and farming units}, will be entrusted with the production of seeds at level 2 (foundation) from seeds produced at level 1 (nuclear seed) by formal system operators. They will then be able to sell their foundation seeds (as well as those skimmed) to other farmers at a price higher than the producer's price (field price fixed by the interprofessional body), in cash (or on credit) to the agricultural and farming unit, either directly or via weekly markets.

- The action plan of action for integration which links stage (N1 ; N2) to the formal circuit at stage (skimmed; N2) to the informal circuit is done via the N1s, which the formal system operators will transmit to the mass producing farmers of the informal system, who will be able to supply themselves and then supply the *banas banas* (salesmen from the weekly markets or *loumas* or weekly rural zone markets) and other N2 farmers and skimmers.

  The financial system (decentralised financial system, National Agriculture Credit Bureau and others) could support the plan of action to become durable and recurrent, and therefore improve the overall quality of the seeds from the informal circuit, by progressively increasing the proportion of high quality foundation seeds.

To remember: The mass-producing farmers (as with the formal system operators) could integrate this high quality production of nuclear seed, which they will be able to achieve for mass production, and can thereafter sell their production of foundation seed to farmers, to agricultural units or to intermediaries and other new operators in the network.

Remarks: The price of foundation seeds) will be higher than those from other ordinary sources (skimming, etc) and therefore the question of their competitiveness (price) could arise. However, their quality (a higher yield with the support of the agricultural council) should rapidly made up the difference; the system of financing is strongly requested to support this plan of action, in order to ensure durability and repetition, the only indicators of availability, accessibility and the quality of the seeds.

III. Plan of action for integration

The workshop involved in the seed network:

- confirmed that the farmers are, in the majority, poor and vulnerable,
- Refers to the seed system study, which shows that the permanent availability of high quality seeds happens through the integration of formal and informal seed systems.
- considers the seed systems integration plan of action,

The workshop participants agreed upon a plan of action covering the 3 following points:

1Location of seed production

Following a reminder/diagnostic of the target zones, it was proposed that the following zones be prioritised:

1. Irrigation zones
2. Zones with high rainfall

Distribution of tasks

The below table describes the level of seeds allocated to each category of participants. The informal system participants should produce N2 seeds from N1s, which will be transmitted to them by the formal system seed operators as described above.

Formal		**Informal**	
Participants	Seed certification. level	Participants	seed cert. level
NARI (*ISRA*)	Foundation-source seed		
Mass Producers/Operators	Source seed, N1 (first and, second generation) N2	O.P./Farmers	Foundation

Important: the junction should happen by N1 (see diagram)

Financing of the integration plan

The State must create conditions in which the financial system, as sketched out in the diagram of integration, is able to integrate the plan of integration; a forum for the participants of the seed networks and the SFD could be considered.

At this stage, it is necessary to carry out a sensitization campaign in order to involve the operators, who have sufficient technical and financial means, in the production and commercialisation of the seeds.

The current system of financing for the rural world (with CNCAs as leader) must first involve decentralized credit, notably saving and credit mutuals, groupings of saving and credit within a framework of preparation to be defined by the participants, in order to allow transparent management and the efficiency of rural credit.

Conditions of implementation and perpetuation of the plan of action

1. Ensuring of the production of bases and N1 and the composition of security stocks;
2. Involvement of all the participants (the adoption of an approach of sharing) via the CLCOP;
3. Organisation of the participants into groupings;

4. Financing or auto-financing of the groupings;
   4.1 National Agriculture Credit (CNCA) : see the credit lines which exist at other banks: see conditions of access to bank financing;
   4.2 Credit unions: list of credit organizations present in the production zones:
5 Technical framework for the following structures:
   DRDR
   ANCAR

1. Infrastructures:
   Maintenance / setting up of stock shops in the target locations, in connection with the networks participants
2. Training, sensitization and professionalism:
   Elaboration and implementation of the reinforcement program of technical skills of the seed participants, in relation with ANCAR.
3. Follow up implementation:
   Setting up of a follow up committee, with the participation of the State (DRDR, ANCAR, ISRA), NGOs (CRS, etc), network inter-professional, and financial institutions present in the production zones.

Seed system Seminar terms of reference

The seminar program is based on the conclusions/recommendations of the seed systems study.

1. Documentation

Following a disastrous agricultural year in 2002/2003, Catholic Relief Services in Senegal decided to implement the emergency reinforcement of contributor's abilities project, financed by OFDA, which is composed of two main sections:

1. The upkeep of seed fairs to enable the families of poor farmers affected by the droughts to access seeds and to sow them in time for the 2003/2004 season
2. Activities aimed at increasing the capacity of the parties concerned to overcome food insecurity and the lack of seeds.

This seminar/workshop is described in this second section and its aim is to restore the study of seed systems.

2. Objectives:

To reinforce the understanding of seed systems in Senegal:

- The formal system based on research in collaboration with seed operators
- The informal system based on sales in the *loumas* or between villages and through exchanges (bartering)

3. Timetable

The workshop will take place over two days:

First day

- Plenary session, during which a study of seed systems will be carried out. This will be followed by a general debate led by a chairperson. This debate should last a maximum of 30 minutes and should lead into the presentation of the themes to be treated in the workshop.

- Participants will work together at the workshop (see workshop terms of references) on the initial theme (two themes are suggested).
  This workshop will be led by CRS, aided by two consultants from DCEG.

Second day

- The participants will tackle the second workshop theme, under the same leadership and with the same assistants.
- Conclusions and recommendations

Workshop terms of reference

Part 1: **Strengthening of the existing organization system**

Workshop objectives:

To have the participants share the success of the seed systems, with a view to integrating the working mechanisms of the two systems.
This will be done by the presentation of the potential achievements of the two systems prior to integration, in order to enable the creation of a durable supply system of improved quality seeds.

1. Achievements and advantages of the formal system

The use of the conventional model for the multiplication of seeds, from various improved research stocks, for the production of improved, base, R1 (N1) and R2 (N2) seeds intended for dissemination. This model guaranties the use of improved quality seeds, the tractability of seeds intended for dissemination, and the use of technical forms of cultures of varieties developed through research. It also enables the commercialization of these seeds in other countries and the introduction of new varieties by the findings of multiple location variable trails.

The contribution of governmental technical services (ISRA, DA/DISEM, ANCAR) in assistance, advice, training, control and certification activities.

2. Achievements and advantages of the informal system

- The use of the informal system participant's techniques, principally of the following partners:
- The producer, grassroots community organizations, which will be directly involved in the programming and in the production of base, R1 and R2 seeds from improved seeds produced by ISRA according to the conventional model.
- Community organizations, private seed operators, intermediary tradesmen and salesmen identified in this circuit will also be involved in the commercialisation of seeds (collection, packaging, storage, transferral).
- The knowledge and experience of these participants will be used in the informal system supply circuit.
- The use of the market and *loumas* circuit in the commercialization of seeds.

Using participants' techniques and the formal system circuit of production and commercialization of seeds enables the extension of the seed supply system to the informal system, which currently provides more than 90% of seeds used by farmers.

Each of the partners involved will be asked to share their feelings on their experiences, and their opinions on the integration of the achievements and advantages of the two systems.

This information will enable participants to make recommendations on the practical methods of integration of the two systems.

Integration of the achievements and advantages of the two systems, with the aim of continuing a lasting system of seed supply

Workshop Objective 2
Discussion points:

- To have the participants share the organizational preconditions for production and commercialization of the proposed integration system.

- The presentation of the new seed network organization, based on the direct responsibility of community organizations involved in the processes of production and commercialization of seeds.

- Decentralized credit should be treated relative to the continuation of the seed supply.

- The opinions of the credit institutions invited to the seminar will be listened to and taken into account in the formulation of recommendations.

- The new organization will entrust to ISRA the conservation of recommended variety stocks, the production of improved seeds, and the carrying out of multiple location variable trials aimed at introducing new varieties.

- All seed production and commercialization programming operations will be entrusted to grassroots community organizations, private seed operators, farmers, and informal circuit tradesmen.

- At the level of each grassroots community, mass seed producers, or those producers who have experience in the field of seed production, will be identified by the grassroots organizations to carry out seed production, with the support of the technical services of the Ministry of Agriculture and development partners, for the production programming. Community level production organizations will be responsible, with the assistance of the technical services, for the commercialization of the seeds.

- All identified participants in the informal system will be involved according to their experience.

- All experience in the informal system in relation to commercialization, i.e.:
- Exchanges or bartering,
- Cash sales,
- Direct credit orders from tradesmen, etc.,

Will be supported, framed and reinforced by the State and development partners.

These informal system participants will be requested to share their experiences of supply and to make suggestions on how to improve the informal system.

Actions on combat against the locusts

Locust invasions

The swarms of desert locusts, which invaded Northern Regions of Senegal devastating crops in Matam, Podor, Linguère and Dagana since July, have reportedly, headed south since August, affecting Central and Eastern regions of Senegal. Diourbel, Thiès, Fatick have been most affected although swarms have reportedly even reached Tambacounda region.

The CRS/Caritas response consisted of:

- Establishment of Early Warning Committees
- Purchase of spraying equipment and pesticides to be used by the respective Caritas
- Trainings on use of pesticides and manipulation of spraying equipment;

CRS and Caritas organized a ceremony on 22 October with the presence of the Governor of Thiès represented by the Minister of Agriculture to acknowledge the contribution CRS was making towards to fight against the desert locusts. The OFDA-CRS contribution is valued at approximately 16,000 000 CFA or $32,000 USD. The ceremony was broadcasted in French and Wolof on national news reports the same day.

CRS/Senegal has been a key actor in coordination meetings in response to the fight against the desert locusts participating in meetings with Ministry of Agriculture, Conference of NGO and UN Office for Coordination of Humanitarian Affairs (OCHA) thanks to the actions undertaken in conjunction with this project.

The CRS Seed project also will purchase over 200 tons of certified seed, which was multiplied by local seed committees from nuclear seed. CRS is in the process of developing a follow-on project for submission to OFDA to develop community Seed enterprises in the targeted regions. The project, which will end this October, is currently undergoing its final evaluation by an outside consultancy team.

Perspectives of program: A competitive bid process was launched for the final evaluation of the program was launched and consultancy firm Dakar engineering and consulting was selected. The objectives of the evaluation are:

1. To determine whether the project has achieved stated goals and objectives, and intermediate results
2. To identify and report on pertinent success stories and lessons learned
3. To identify strengths and weaknesses in project financial and administrative implementation

Full report results will be submitted separately. Full terms of reference are included in the annex.

Annex IV: Seed Prices

(Median prices in the various seed fairs per region for major crops)

Seeds	Fatick	Thies	Diourbel	Zig
Groundnuts	800- 750- 700– 625- 575- 565	750- 700- 650- 600- 550	750- 650- 600- 550	1000- 800- 700- 500 75 (SONACOS unshelled)
Niebe (Cowpea)	1000- 750-	1000- 500 -	1000- 850- 800- 700-	1000- 800-
Millet	175	500 (high quality)- 150 (local)	500 (high quality)- 150 (local)	1000 – 800
Sorghum	200 – 150 -	500		500 – 300 – 250
Corn (Maize)	200		500 – 300	1000 – 500

Annex V

List of major documents produced through the Senegal Emergency Strengthening of Seed Security and Stakeholder Capacity Project commissioned by CR/Senegal

Dakar Consulting and Engineering Group (DCEG) "Study of Seed System and the Workshop on actors of the seed Sector". July, 2004

Part I consists of participatory study of the 4 targeted regions on the functioning of sources, markets, actors in seed sector. Part II is workshop report of discussion of findings for Part I study with key actors in Senegal from government, NGO/projects, farmers organizations and credit organizations. Includes recommendations for improving the sector.

Dakar Consulting and Engineering Group (DCEG), "Final evaluation of the Senegal Emergency Strengthening of Seed Security and Stakeholder Capacity Project". October, 2005.

Remington, Tom and Christophe Droeven "Senegal Seed system, Seed security and seed voucher and Fair Mission report", May 2003

Provides diagnostic overview of Thiès, Diourbel- Fatick regions on seed security, potential sites and tools for assessment of vendor/sources; guidelines and recommendations for CRS to undertake in launching the SVF project for the first time in the region.

Sow-Soumaré, Mariam (Agro-economist, expert in Food security of Cabinet ECOVA) "Rapid Rural Study on the Food and Seed Security of the populations of Ziguinchor". May 2003

Sow-Soumaré, Mariam (Agro-economist, expert in Food security of Cabinet ECOVA) "Rapid Rural Study on the Food and Seed Security of the populations of Thiès, Diourbel-Fatick" May 2003

Participatory overview of food security in the targeted regions with recommendations for action on food and seed security relief. (in French)

Wague, Kisma (Agricultural Engineer, MSc Seed Technology). "Report on the Seed Security Study" (Thiès, Diourbel, Fatick and Ziguinchor) ,March, 2004

Participatory seed survey of the 4 regions targeted by the program (in French)

Annex VI.

Accounting of property acquired with federal funds with a per unit fair market value of $5,000 or more

Item	Quantity	Value	Location
Toyota Hi-Lux Pick up Truck	1	$22,911	CRS/Ziguinchor office: Use on Casamace USG funded program "rebuilding Basic Infrastructure in the Casamance" Cooperative Agreement 685-04-A-04-00040-00